

FWA-3051

1U Network Appliance for uCPE/SD-WAN and NGFW based on Intel® Xeon® D-2700/2800 Series Processor

Preliminary



Features

- Powered by single Intel® Xeon D-2700/D-2800 series processor up to 22C/44T with Intel® QAT and DPDK to boost performance
- 4 x DDR4 up to 3200 MHz ECC UDIMM/RDIMM/LRDIMM support
- 2 x NMC (Network Mezzanine Card) PCIe Gen4 slots for a wide range of 1G/10G/25G/40G/100G NICs and POE module expansion
- Upgradable with interface for Advance-LTE/5G
- 2 x 2.5" internal SATA HDDs/SSDs drive bay
- 2 x M.2 2280 SSD/NVMe sockets
- Advantech IPMI 2.0 platform management with Redfish compliance

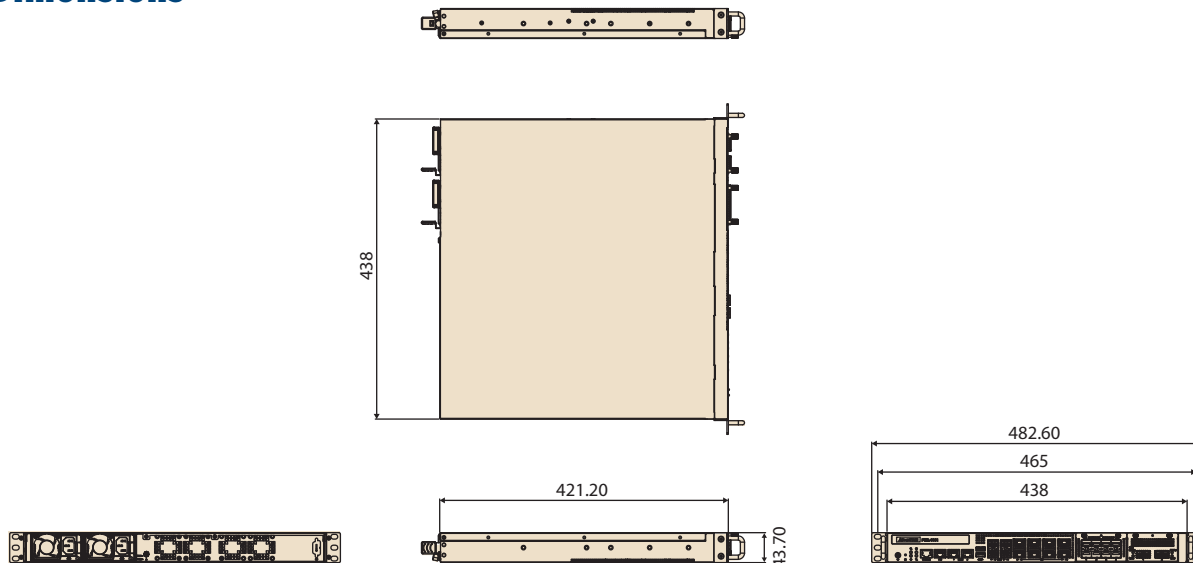


Specifications

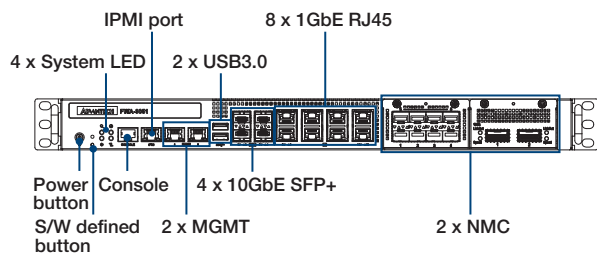
System P/N		FWA-3051-8CA1R	FWA-3051-16A1R	FWA-3051-20A1R
Form Factor		1U Rack Mount		
Processor System	Processor	Intel® Xeon® D-2832NT	Intel® Xeon® D-2876NT	Intel® Xeon® D-2896NT
	Core Count	8C/16T	16C/32T	20C/40T
	Base Frequency	2.1 GHz	2.0 GHz	2.0 GHz
	Chipset	N/A		
	BIOS	AMI UEFI		
Virtualization		Intel® VT-x, VT-d, SR-IOV		
Memory	Technology	DDR4 2667MHz	DDR4 2933MHz	DDR4 2933MHz
	Max. Capacity	128 GB UDIMM / 256 GB RDIMM / 512 GB LRDIMM		
	Socket	4 x 288-pin DIMM		
	ECC Support	UDIMM / RDIMM / LRDIMM		
Networking	Controller	2 x Intel i210, 1 x Intel i350, Others via Intel SOC (Idaville HCC Ethernet)		
	1GbE	4 x 1GbE RJ45 via Marvell 88E1543 (w/ Advanced LAN bypass)		
		4 x 1GbE RJ45 via Intel i350-AM4		
	10GbE	2 x 1GbE RJ45 via Intel i210-AT for management		
		4 x 10GbE SFP+ via Intel SOC		
LAN bypass	Two pair of LAN bypass			
Expansion Slot	PCIe x16	1 x PCIe x16 (Option: by project base)		
	NMC	2 x PCIe Gen4 x8 (Option: 1x Field-replaceable NMC-E02 POE by project base)		
IPMI		IPMI 2.0 and Redfish compliant		
Storage	2.5" bay	2 x SATA HDD/SATA SSD		
	M.2 (SSD)	2 x 2280 M.2 M-key slot for SATA SSD or PCIe x4 Gen3 NVMe SSD		
I/O	Console	1 x RJ45 type console		
	USB	2 x USB 3.0		
	LED Indicator	1 x Power LED,		
		1 x Alert LED,		
		1 x Locate LED,		
		1 x Software-defined LED		
	Display	1 x VGA port		
	Button	1 x Power button, 1 x Software-defined button		
	Others	1 x dedicated 1GbE LAN for IPMI		
	TPM	None (Option: Infineon TPM 2.0 module)		
LCD Module	None			
Power Supply	Power Type	AC Redundant CRPS (Option: DC Redundant CRPS)		
	Watts	300W		
	Input	AC: 100-240V~, 50-60Hz (Option: DC -48V, 800W by project base)		
	Connector	AC 3pin plug		
Environment	Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)		
	Non-operating Temperature	-40 ~ 70 °C (-40 ~ 158 °F), 60 °C@95% Non-Condensing Humidity		
	Vibration Resistance (Operation)	5-500 Hz, 0.3 Grms, 3 axes, 1 hr/per axis		
	Shock Protection (Operation)	10 G, 11 ms		
Cooling		4 x System fans with smart fan feature		
Mechanical	Construction	SECC		
	Mounting	1U Rackmount		
	Dimensions (W x H x D)	438 x 44 x 420 mm (17.2" x 1.7" x 16.5")		
	Weight (G.W)	8.23kg (18.14 lbs)		
OS support		Linux (CentOS, Red Hat, Ubuntu, Fedora)		
Advantech S/W Packages		1. ALBPCU 2. APOECU 3. ipmitool 4. Server iManager (Linux base) -Health Guard -Diagnostic Framework -Network device identifier (NDI) 5. Quick Start Linux Image		
Certification	EMC/Safety	CE, FCC, CB, UL, CCC		

Dimensions

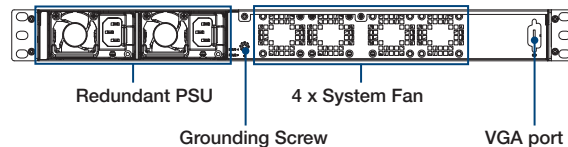
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Processor	Core/Thread	Base frequency	DDR4	QAT	NMC	Storage Bay	USB 3.0	IPMI Port	Console Port	LAN Port		VGA	System Fan	PSU
											1G RJ45	10G SFP+			
FWA-3051-8CA1R	Intel® Xeon® D-2832NT	8/16	2.1GHz	4	50Gbps	2	2	2	1	1	8	4	1	4	2 (300W AC)
FWA-3051-16A1R	Intel® Xeon® D-2876NT	16/32	2.0GHz	4	50Gbps	2	2	2	1	1	8	4	1	4	2 (300W AC)
FWA-3051-20A1R	Intel® Xeon® D-2896NT	20/40	2.0GHz	4	100Gbps	2	2	2	1	1	8	4	1	4	2 (300W AC)

Packing List

Part Number	Description
1700018950	M Cable D-SUB 9P(F)/RJ45-8P8C 220cm

Optional Accessories

Part Number	Description
1702002600	Power cord 3P 180cm, USA
1702002605	Power cord 3P 180cm, Europe
1702031801	Power cord 3P 180cm, UK
1700000237	Power cord 3P 180cm, JP
1700009652	Power cord 3P 180cm, China
968AE00073	22" Rail Kit for 438mm chassis(TL:381mm)
FWA-3050-800WPSU	1pc 800W DC PSU with 1pc DC cable
FWA-3050-2POST	FWA-3050 rackmount kit for 2 post cabinet
FWA-3050-300WPSU	1pc 300W AC PSU
PCA-TPMSPI-00A1	TPM 2.0 module (SPI)